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(54) Title: DISTRIBUTED MEDIUM ACCES CONTROL FOR BROADBAND ACCESS SYSTEMS
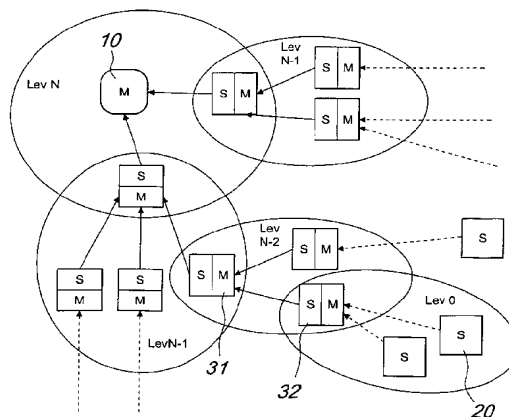
(57) Abstract: A distributed scheduler for frame based communication between a plurality of terminals and a master controller, comprises a plurality of concentration elements for local scheduling of upstream data, the plurality of concentration elements and the plurality of terminals being partitioned over a plurality of cells distributed on a multiple hierarchical level star topology, each cell belonging to a hierarchical level N, where N is comprised between a top level, corresponding to a single cell to which the master controller is assigned, and a bottom level; at each cell at level N one concentration element being the master element for the cell and the remaining concentration elements and terminals in the cell being slave elements of the master element for the cell; each master element in a cell at level N being in turn a slave of the master element in one of the cells at level N+1, the master element at the top level being the master controller; each master element at level N comprising means for collecting uplink aggregate requests and flows originating from the slave elements thereof and means for generating an aggregate flow and aggregate uplink requests, which are input to the master element at level N+1 to which the master element at level N is slave.